1145 POSTER

EVALUATION OF POST OPERATIVE IMMUNODEPRESSION (P.O.I.) AFTER MAJOR SURGERY FOR UROLOGIC CANCERS

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Cancer is generally considered as a cause of immunodepression. A transient impairment of immune response, possibly caused by surgical trauma or general anesthesia, has been observed post-operatively. P.O.I. seems to correlate with an increase in infections and metastatization. We investigated 20 patients (pts) submitted to major surgery with general anesthesia for urological cancers (mean age 65.3 years, range 41–73). Exclusion criteria were: need for steroid therapies, metabolic diseases, immunodeficiency syndrome. A complete immunological and clinical evaluation was made at days −3, +1 and +7 in respect to surgery. These data have been obtained: transient leukocytosis on day 1 associated with a rise in the absolute neutrophil count and a significant fall in the lymphocyte count between days −3 and +7 ($p < 0.0001$). Significant increase of the CD4/CD8 lymphocyte ratio ($p = 0.00124$) on day +7 with a slight decrease in T-cell (but with increase of activated T-cells). No changes for NK cells, B lymphocytes and T/B lymphocyte ratio. Transient increase of the cortisol level (p = n.s.) after surgery. Immunoglobuline (Ig) G values fell from day −3 to day +7 ($p < 0.0005$), while IgM rose almost to significant values, no changes for IgA. Our data, blood lymphocyte depletion together with some modifications of lymphocyte populations and changes in Ig levels (reported for the first time) provide evidence of P.O.I. phenomenon. Correlation of these data with infection episodes (3 cases) are under evaluation and will be presented.

1146 POSTER

A BLADDER SPARING APPROACH IN ELDERLY PATIENTS WITH INVASIVE BLADDER CANCER (BC)

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This study was carried out to evaluate the influence of age in terms of toxicity, response and survival in elderly pts with muscle invading BC treated with a bladder sparing approach including an alternated chemoradiotherapy after TUR. Twenty-eight pts with T1G3-T4 N0 M0 transitional BC entered the study. Characteristics of pts were: median age, 72 yrs. (Range 70–78); median ECOG PS, 0 (range 0-1); M/F, 23/5; T1G3, 2 pts; T2, 14 pts; T3, 9 pts; T4, 3 pts; G2, 12 pts; G3, 16 pts. The first 9 pts received 4 cycles of CDDP 20 mg/sqm and FU 200 mg/sqm dd. 1–5 during wks 1, 4, 7 and 10 alternated with radiotherapy (40 Gy in 20 fractions during wks 2, 3, 8, 9). The second group of 19 pts received 3 cycles of MTX 40 mg/sqm dd. 1, 8 and CDDP 30 mg/sqm dd. 2–4 (wks 1, 4, 7) alternated with 50 Gy of radiotherapy (20 fractions, wks 2, 3, 5, 6). All pts were evaluable. A cCR was observed in 20 pts (71%), cPR in 5 pts (10%) and a cNR in 3 pts (11%). After a median follow-up of 34 mos, 17 pts (61%) were alive and 13 pts (46%) free of tumor. In 15 pts (54%) the bladder was free of invasive disease and functioning well, although in 1 (4%) a superficial tumor recurred. The median OS and DFS was 25 mos (range 3–34) and 23.5 mos (range 3–77) respectively. Systemic G2–G3 (OMS) side effects were: leukopenia in 5 pts; thrombocytopenia in 2 pts; anemia; stomatitis and diarrhea in 1 pts. A moderate or severe cystitis or proctitis was observed in 5 pts and 4 pts respectively. This aggressive conservative approach was safe and feasible also in elderly pts, allowed bladder sparing in a high rate of pts with a survival comparable to that reported with more traditional treatment.

1147 POSTER

GEMCITABINE IN RESISTANT STAGE IV BLADDER CANCER: A PHASE II STUDY

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Gemcitabine, a novel nucleoside analogue, has significant single-agent activity in a number of chemoresistant tumours such as ovary and non-small cell lung cancer. In an early phase I study with gemcitabine (dose: $\geq$875 mg/m^2; schedule: wk ×3 q4 wks), 1 complete and 2 partial responses were observed in 14 previously treated metastatic bladder cancer patients (overall response rate 21.4%). We report a phase II study of gemcitabine in patients with stage IV bladder cancer who had been treated unsuccessfully with one previous cisplatin-containing regimen. Characteristics of all 18 patients entered into the study were: 15 males; median age 65.1 years (range 39–75), Karnofsky PS 60 (3 pts), 70 (7), 80 (4), 90 (2), 100 (2). Gemcitabine 1250 mg/m^2 was given once a week for 3 weeks followed by one week of rest (one cycle). Of 14 patients eligible for efficacy analysis (4 patients too early), having received treatment for at least 2 cycles, there were 2 complete responses and 2 partial responses for an overall response rate of 29%. All 18 patients were evaluable for toxicity. There were no WHO grade 3 or 4 non-laboratory toxicities. The only WHO grade 4 laboratory toxicity was thrombocytopenia (1 pt). WHO grade 3 laboratory toxicities were: thrombocytopenia (1 pt), ALT (1), AST (1), creatinine (1), vomiting (2), anaemia (1). This study confirms that gemcitabine has single-agent activity in stage IV bladder cancer and has a mild to modest toxicity profile.

1148 POSTER

BLADDER PRESERVATION IN T3 BLADDER CANCER: A DECADE OF FOLLOW-UP

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Neo-adjuvant cisplatin and methotrexate were given to 32 eligible patients out of 57 patients with T3 transitional cell carcinoma (TCC) of the bladder. All patients underwent standard work-up, finished with a diagnostic muscle showing biopsy leaving the rest of the tumor as an *in vivo* marker. A complete resection/staging procedure was repeated after the second and the fourth cycle, followed by definitive open surgery. The aggressive staging resulted in a near perfect balance between clinical/pathological staging. Seven patients did not complete the schedule. A total of 15 patients out of 25 had a complete response (CR). Five of the CR's elected hemi-cystectomy. All of the CR's except two survived a decade free of disease. All other patients died in five years. Downstaging to CR offers excellent prognosis and a chance for bladder preservation.

1149 POSTER

BLADDER SPARING BY CHEMOTHERAPY AND RADIATION IN PATIENTS WITH INVASIVE BLADDER CANCER

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48 consecutive patients (pts) with muscle-invasive bladder cancer were treated between November 1988 and May 1993. All pts had pure transitional carcinoma, absence of diffuse Tis, and clinic N0M0 stage. 39 pts had T2–3a stages and 9 had T3b–4a. The treatment consisted of RTU, neoadjuvant chemotherapy M-VAC (CT) (2–4 cycles), and radiotherapy (RT) (44 Gy). RT was continued to 64 Gy in pts with biopsy-proven absence of invasive cancer (CR). Cystectomy was performed in pts with residual invasive tumor. 9 pts did not receive RT: 6 with failure to CT underwent immediate cystectomy, and 3 with CR received only CT.

The CR rate to neoadjuvant treatment was 75%. After a mean follow-up of 35 months, 24 pts (50%) had preserved bladders free of invasive tumor and functioning well. The actuarial survival and disease free survival at 3 years were, respectively, 49% and 56%. Of the 24 currently surviving pts 87% have their bladder preserved. 5 pts required salvage cystectomy for recurrent invasive cancer or diffuse Tis. 9 pts had recurrent superficial bladder tumors, and 5 of them preserved their bladders after further RTU and BCG.

The response to CT had prognostic value for survival ($P = .0004$). Long-term bladder sparing was significantly associated with absence of hydronephrosis and bladder-confined disease (T2–T3a). Severe complications were: 1 death for fulminant hepatitis after CT, 2 late radiation cystitis that required cystectomy, with one death in postoperatory, and colovesical fistula that needed rectosygmoidectomy. The long-term bladder preservation is feasible in a selected group of pts by multimodality treatment. Most surviving pts had their bladders intact.

1150 POSTER

RADIOTHERAPY PLUS CARBOPLATIN VERSUS RADIOTHERAPY IN LOCALLY ADVANCED BLADDER CANCER

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To improve the treatment results and to specify the place of a conservative treatment in locally advanced bladder cancer, we designed a prospective randomized study using carboplatin with radiotherapy as concurrent combination (group A) and radiotherapy alone (group B). 59 patients in